



Please use a plus sign (+) inside this box → ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

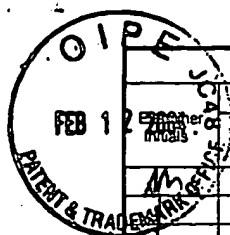
Sheet 1 of 3

### Complete if Known

Application Number	09/410,368
Filing Date	September 30, 1999
First Named Inventor	Havens et al.
Group Art Unit	1631
Examiner Name	Ardin Marschel
Attorney Docket Number	612404-306 (prev 244/006)

### U.S. PATENT DOCUMENTS

Examiner Initials *	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	Number	Kind Code <sup>2</sup> (if known)			
AM	3981671		Edwards	09/21/76	
	RE 30,130		Edwards	10/30/79	
	4205028		Brueggemann et al	05/27/80	
	4284399		Newcomb et al	08/18/81	
	4497763		Monnet	02/05/85	
	4552633		Kumakura et al	11/12/85	
	4787963		MacConnell	11/29/88	
	4897228		Miwa et al	01/01/90	
	5151217		Price	09/29/92	
	5164162		Ridenour	11/17/92	
	5171782		Candau et al	12/15/92	
	5217492		Guire et al	06/08/93	
	5238613		Anderson	08/24/93	
	5244799		Anderson	09/14/93	
	5334310		Frechet et al	08/02/94	
	5405618		Buttery et al	04/11/95	
	5445934		Fodor et al	08/29/95	
	5453185		Frechet et al	09/26/95	
	5460872		Wu et al	10/24/95	
	5496509		Yamamoto et al	03/5/96	
	5510074		Rose	04/23/96	
	5521229		Lu et al	05/28/96	
	5527670		Stanley et al	06/18/96	
	5534132		Vreeke et al	07/09/96	
	5624973		Lu et al	04/29/97	
	5648482		Meyer	07/15/97	
	5653939		Hollis et al	08/05/97	
	5783054		Raguse et al	07/21/98	
	5849486		Heller et al	12/05/98	
	5889104		Rosenmayer	03/30/99	
	5929208		Heller et al	07/27/99	
	5952398		Dietz et al	09/14/99	
	5981734		Mirzabekov et al	11/09/99	
	6015666		Springer et al	01/18/00	
	6017696		Heller	01/25/00	
	6031277		Sugiura et al	02/29/00	
	6039897		Lochhead et al	03/21/00	
	6048690		Heller et al	04/11/00	
	6051380		Sosnowski et al	04/18/00	
	6054270		Southern	04/25/00	
	6064461		Nishida	05/16/00	
	6099783		Scranton et al	08/08/00	
	6121027		Clapper et al	09/19/00	
	6136444		Kon et al	10/24/00	
	6143412		Schueller et al	11/07/00	
	6197145	B1	Todd et al	03/06/01	
	6197881	B1	Cosnier et al	03/06/01	



U.S. PATENT DOCUMENTS				
U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
Number	Kind Code <sup>2</sup> (if known)			
6245249	B1	Yamada et al	06/12/01	
6245508	B1	Heller et al	06/12/01	
6264825	B1	Blackburn et al	07/24/01	
6303082	B1	John et al	10/16/01	
6306348	B1	Havens et al	10/23/01	
6458584	B1	Mirzabekov et al	10/01/02	
6524517	B1	Havens et al	02/25/03	

FOREIGN PATENT DOCUMENTS						
Examiner Initials <sup>*</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			
AM	EP	0047645	B1	Kashihara et al	11/28/84	
	EP	0226470	A2	Bosley et al	06/24/87	
	EP	0243501	A1	Saeda et al	11/04/87	
	JP	55-152027	A	Keisuke et al	11/27/80	
	JP	56-167419	A	Toshiji et al	12/23/81	
	JP	59-215838	A	Hideo et al	12/05/84	
	JP	59-227131	A	Hiroyuki	12/20/84	
	JP	01163040	A	Satoshi	06/27/89	
	JP	02292013	A	Hidekazu et al	12/03/90	

	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
AM	ANDERSON et al, Polymerized Lyotropic Liquid Crystals As Contact Lens Materials, Physica A, 1991, 176, 151-167, Elsevier Science Publishers B.V. (North Holland).	
	ANTONIETTI et al., Polymerization In Microemulsions-A New Approach To Ultrafine, Highly Functionalized Polymer Dispersion, Macromol.Chem.Phys., 1995, 196, 441-446, Hüthig & Wepf Verlag, Zug.	
	ANTONIETTI et al, Morphology Variation Of Porous Polymer Gels By Polymerization In Lyotropic Surfactant Phases, Macromolecules, 1999, 32, 1383-1389, American Chemical Society.	
	ANTONIETTI et al, Polymer Gels With A Micron-sized, Layer-Like Architecture By Polymerization In Lyotropic Cocogem Phases, Langmuir, 1998, 14, 2670-2676, American Chemical Society.	
	ANTONIETTI et al., Synthesis Of Sponge-Like Polymer Dispersions Via Polymerization Of Bicontinuous Microemulsions, Colloid Polym Sci, 1996, 274, 698-702, Steinkopff Verlag.	
	ANTONIETTI et al., Microemulsions Polymerization: New Surfactant Systems By Counterion Variation, Adv. Mater., 1996, 8, 10, 840-844, VCH Verlagsgesellschaft mbH, Weinheim.	
	ARENKOV et al, Protein Microchips: Use For Immunoassay & Enzymatic Reactions, Analytical Biochemistry, 2000, 278, 123-131, Academic Press.	
	BATES, Polymer-Polymer Phase Behavior, Science, Feb. 22, 1991, 25, 898-905.	
	BENEDICTO et al, Bicontinuous Cubic Morphologies In Block Copolymers & Amphiphile/Water Systems: Mathematical Description Through The Minimal Surfaces, Macromolecules, 1997, 30, 3395-3402, American Chemical Society.	
	BRINKER et al., Sol-Gel Science, 1990, Academic Press, San Diego.	
	BROWN, Dot & Slot Blotting of DNA, Current Protocols in Molecular Biology, 1993, Supplement 21, 2.9.15-2.10.16.	
	BURBAN et al, Organic Microporous Materials Made By Bicontinuous Microemulsion Polymerization, AIChE Journal, April 1995, 41, 4, 907-914	
	CHIENG et al., Microporous Polymeric Materials By Microemulsion Polymerization: Effect of Surfactant Concentrations, Langmuir, 1995, 11, 3321-3326.	
	CHIENG et al., Morphology Of Microporous Polymeric Materials By Polymerization Of Methyl Methacrylate & 2-Hydroxyethyl Methacrylate In Microemulsions, Polymer, 1995, 36, 10, 1941-1946, Elsevier Science Ltd, Great Britain.	
	CHIENG et al, Formation Of Microporous Polymeric Materials By Microemulsion Polymerization Of Methyl Methacrylate & 2-Hydroxyethyl Methacrylate, Journal of Applied Polymer Science, 1998, 60, 1561-1568, John Wiley & Sons, Inc.	
	HENTZE et al, Synthesis Of Organic Polymer Gels In Microemulsions & Lyotropic Mesophases, Ber.Bunsenges. Phys. Chem., 1997, 101, 11, 1699-1702, Wiley-VCH, Weinheim.	
	KEMPE et al, Receptor Binding Mimetics: A Novel Molecularly Imprinted Polymer, Tetrahedron Letters, 1995, 36, 20, 3563-3566.	
	LEE et al., Polymerization Of Nonlamellar Lipid Assemblies, J. Am. Chem. Soc., 1995, 117, 5573-5578	
	LINDBLOM et al, Cubic Phases & Isotropic Structures Formed By Membrane Lipids-Possible Biological Relevance, Biochimica et Biophysica Acta, 1989, 988, 221-256, Elsevier Science Publishers B.V. (Biomedical Div)	
	O'CONNELL et al, Polyacrylamide Gels With Modified Cross-Linkages, Analytical Biochemistry, 1976, 76, 63-73, Academic Press, Inc.	
	PAUL et al, Cubic Phase Polymer Hydrogels: Templated Polymerization from Surfactant Mesophases, AIChE Meeting, Dallas, Texas, October 31-November 5, 1999, 71.	
	PETERS et al, Rigid Macroporous Polymer Monoliths, Adv. Mater, 1999, 11, 14, 1169-1181, Wiley-VCH, Weinheim.	
	RAJ et al, Formation of Porous Polymeric Structures By The Polymerization Of Single-Phase Microemulsions Formulated with Methyl Methacrylate & Acrylic Acid, Langmuir, 1991, 7, 2586-2591, American Chemical Society.	
	RAJ et al, Polymerization Of Microstructured Aqueous Systems Formed Using Methyl Methacrylate & Potassium Undecanoate, Langmuir, 1992, 8, 1931-1936.	



	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
✓	RAJ et al, Synthesis Of Porous Polymeric Membranes By Polymerization Of Micro-emulsions, Polymer, 1993, 34, 15, 3305-3312, Butterworth-Heinemann Ltd.	
	RAJ et al., Microcellular Polymeric Materials From Microemulsions: Control Of Microstructure & Morphology, Journal Of Applied Polymer Science, 1993, 47, 499-511, John Wiley & Sons, Inc.	
	RIGHETTI et al., On The Limiting Pore Size Of Hydrophilic Gels For Electrophoresis & Isoelectric Focusing, Journal Of Biochemical & Biophysical Methods, 1981, 4, 347-363.	
	RIGHETTI et al., Towards New Formulations For Polyacrylamide Matrices, As Investigated By Capillary Zone Electrophoresis, Journal Of Chromatography, 1993, 638, 165-178, Elsevier Science Publishers B.V.	
	RILL et al, Templated Pores In Hydrogels For Improved Size Selectivity In Gel Permeation Chromatography, Analytical Chemistry, July 1, 1998, 70, 13, 2433-2438.	
	SASTHAV et al, Characterization Of Microporous Polymeric Materials: Pore Continuity & Size Distribution Via Thermal Analysis, Journal Of Colloid & Interface Science, September 1992, 152, 2, 376-385.	
	SEDDON, Structure Of The Inverted Hexagonal (H <sub>II</sub> ) Phase, & Non-Lamellar Phase Transitions Of Lipids, Biochimica et Biophysica Acta, 1990, 1031, 1-69, Elsevier Science Publishers BV (Biomedical Div).	
	SHIYAKHTENKO et al., Atomic Force Microscopy Imaging Of DNA Covalently Immobilized On A Functionalized Mica Substrate, Biophysical Journal, July 1999, 77, 568-576, Biophysical Society.	
	SRISIRI et al, Polymerization Of The Inverted Hexagonal Phase, J. Am. Chem. Soc., 1997, 119, 4866-4873, American Chemical Society.	
	SVEC et al, Molded Rigid Monolithic Porous Polymers: An Inexpensive, Efficient & Versatile Alternative To Beads For The Design Of Materials For Numerous Applications, Ind. Eng. Chem. Res., 1999, 38, 34-48, American Chemical Society.	
	VASILISKOV et al., Fabrication Of Microarray Of Gel-Immobilized Compounds On A Chip By Copolymerization, BioTechniques, September 1999, 27, 3, 592-605.	
✓	VIKLUND et al, Monolithic, "Molded", Porous Materials With High Flow Characteristics For Separations, Catalysis, Or Solid-Phase Chemistry: Control Of Porous Properties During Polymerization, Chem. Mater., 1996, 8, 744-750, American Chemical Society.	

Examiner Signature	<i>Arden Manscher</i>	Date Considered	5-1-05
--------------------	-----------------------	-----------------	--------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



MAR 17 2005

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449-PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(use as many sheets as necessary)*

Sheet	1	of	1
-------	---	----	---

**Complete if Known**

Application Number	09/410,368
Filing Date	September 30, 1999
First Named Inventor	Havens et al.
Group Art Unit	1631
Examiner Name	Ardin Marschel
Attorney Docket Number	612404-306 (prev 244/006)

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sub>6</sub>
	Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				

	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
AM	HERMANSON, Bioconjugate Techniques, Academic Press, San Diego, California, 1998, table of contents only.	
AM	ODIAN, Principles of Polymerization, 3 <sup>rd</sup> Edition, John Wiley & Sons, New York, New York, 1991, p. 232.	
AM	SAMAL, et al. "Electroinitiated Polymerization Of Acrylamide In Acetonitrile Medium", J. Polym. Sci. Polym. Chem., 26, 1988, pp 1035-1049.	

Examiner Signature	<i>Adin</i>	Date Considered	5-1-05
-----------------------	-------------	--------------------	--------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**